

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re divisional patent application of 09/948,588 filed on September 10, 2001

Serial No.: Not Yet Assigned

Group Art Unit: Not Yet Assigned

Filing Date: Concurrently herewith

Examiner: Unknown

For: ONE-WAY CLUTCH

Honorable Commissioner of Patents  
Alexandria, Virginia 22313-1450

**PRELIMINARY AMENDMENT**

Sir:

Prior to examination on the merits and calculation of the filing fee, please amend the above-identified application as follows:

**IN THE CLAIMS:**

**Please amend claims as follows:**

Claim 1. (Canceled)

Claim 2. (Currently Amended) A one-way clutch comprising:

an inner race;

an outer race;

a plurality of engaging members disposed between the inner and outer races;

retainers for retaining the engaging members;

springs for urging the engaging members in one direction; and

a pair of end bearings which are respectively disposed on opposite sides

between the inner race and the outer race, each of the end bearings having a U-shaped cross

section and including;

a first hollow cylindrical portion fitted to an outer peripheral surface of the inner race;

a second hollow cylindrical portion fitted to an inner peripheral surface of said outer race;

an annular portion connecting the first hollow cylindrical portion to said second hollow cylindrical portion; and

a plurality of recessed portions formed at least in the inner peripheral surface of the first hollow cylindrical portion of each of the end bearings

~~The one-way clutch according to claim 1,~~ wherein the recessed portions ~~are~~ comprise a plurality of dimple-like dents.

Claim 3. (Canceled)

Claim 4. (Canceled)

Claim 5. (Currently Amended) A one-way clutch comprising:

an inner race;

an outer race;

a plurality of engaging members disposed between the inner and outer races;

retainers for retaining the engaging members;

springs for urging the engaging members in one direction; and

a pair of end bearings which are respectively disposed on opposite sides between the inner race and the outer race, each of the end bearings having a U-shaped cross section and including;

a first hollow cylindrical portion fitted to an outer peripheral surface of the inner race;

a second hollow cylindrical portion fitted to an inner peripheral surface of said outer race;

an annular portion connecting the first hollow cylindrical portion to said second hollow cylindrical portion; and

a plurality of projections formed at least on the inner peripheral surface of the first hollow cylindrical portion of each of said end bearings.

Claim 6. (Currently Amended) A one-way clutch including:

an inner race;

an outer race;

a plurality of engaging members disposed between the inner and outer races;

retainers for retaining the engaging members;

springs for urging the engaging members in one direction; and

a pair of end bearings which are respectively disposed on opposite sides between the inner race and the outer race, each of the end bearings having a U-shaped cross section and including;

a first hollow cylindrical portion fitted to an outer peripheral surface of the inner race;

a second hollow cylindrical portion fitted to an inner peripheral surface of said outer race;<sub>1</sub>

an annular portion connecting the first hollow cylindrical portion to said second hollow cylindrical portion;<sub>1</sub> and

axial grooves which extend through to opposite ends of the first hollow cylindrical portion and are formed at a plurality of circumferential positions at least in an inner peripheral of the first hollow cylindrical portion of each of the end bearings, each of the axial grooves having a circular-arc-shaped cross section in which its radial depth becomes larger toward a central portion of the axial groove.

Claim 7. (Original) The one-way clutch according to claim 6, wherein a circumferential groove having a predetermined axial width and a bottom surface which includes portions of the axial grooves where the radial depth becomes maximum is formed in the inner peripheral surface of the first hollow cylindrical portion of each of the end bearings.